Water Quality Update: "Sue Sump" who?

By Karen Larson Henry, P.E. Deputy Director, City of San Diego Storm Water Pollution Prevention Program

Hey "Sue", "Sue Sump". Welcome to San Diego.

If you haven't heard about her arrival, you better learn quickly because she will be here sometime before the end of the year. You will likely never meet *Sue* but her fingerprints will be left on future development and redevelopment projects in San Diego County forever. "*Sue Sump*" is actually not a person, a monster truck, or racing sloop but an acronym for Standard Urban Storm Water Mitigation Plan (SUSMP), a set of new regulations for development and redevelopment. The regulations are tied to the 1972 federal Clean Water Act, which established the National Pollutant Discharge Elimination System (NPDES) permit program. This NPDES permit program regulates the discharge of pollutants to waters of the United States.

Urbanization generally results in an increase in pollutant sources and impervious surfaces. Urbanization compounds its negative effects on water quality because the increase in pollutant sources leads to an increase in pollutant loads found in storm water, while the increase in impervious surfaces prevents natural processes, such as infiltration and biofiltration, from reducing the pollutant loads. The resulting storm water flows are greater in volume and the pollutant loads are greater because the natural filtration no longer exists (e.g. vegetation is removed and soil is paved over). This causes the quality of receiving waters to be adversely impacted.

Governmental agencies in San Diego County collect and discharge storm water and urban runoff containing pollutants through their storm water conveyance systems. These agencies implement programs to reduce pollutants under NPDES permit requirements commonly known as the Municipal Storm Water Permit for San Diego Copermittees (i.e. San Diego County, the Port of San Diego, and 18 cities). These programs resulted from 1987 Amendments to the Clean Water Act. The U.S. Environmental Protection Agency (EPA), which administers the Clean Water Act, has delegated authority to the State of California. The State exercises its delegated authority through its agency, the State Water Resources Control Board, which uses a system of regional entities (the Regional Water Quality Control Boards) to enforce the Clean Water Act. In February 2001, the San Diego Regional Board adopted Order No. 2001-01, an updated Municipal Storm Water Permit. The Permit requires implementation of Standard Urban Storm Water Mitigation Plans (SUSMPs).

The purpose of the SUSMP is simple:

To reduce the negative impacts to receiving waters (e.g. our precious beaches and bays) from development runoff.

As with a lot of things in life, although simple in concept, implementation will be complicated and one of the biggest challenges facing cities throughout Southern California. The new regulations will require that urban runoff pollution issues be specifically addressed in development planning for public and private projects. In addition to considering alternative site design approaches and instituting source controls (i.e. methods to keep pollutants out of contact with storm water), structural treatment devices or storm water Best Management Practices (BMPs) will be required. Specific BMP examples include biofilters (e.g. grass swales), detention basins, infiltration basins, wetlands, drainage inserts, filtration systems, and hydrodynamic separator systems. These structural treatment devices are relatively new to our area but have been used in other parts of the nation for years.

The Model Standard Urban Storm Water Mitigation Plan (SUSMP), which is intended to guide the implementation countywide, is available on the County of San Diego's Project Clean Water website, www.projectcleanwater.org. This Model SUSMP was submitted to the San Diego Regional Water Quality Control Board in February 2002. This Model SUSMP will be reviewed and approved by the Regional Board in a public process. The Copermittees are then required to adopt their own Local SUSMP and ordinances consistent with the Regional Board-approved Model SUSMP within 180 days after that approval.

Under the Local SUSMP, each Copermittee will approve the SUSMP project plan(s) as part of the development plan approval process for discretionary projects, and prior to issuing permits for ministerial projects. To allow flexibility in meeting SUSMP design standards, structural treatment control Best Management Practices (BMPs) may be located on- or off-site, used singly or in combination, or shared by multiple developments, provided certain conditions are met.

The SUSMP will have a broad impact and add costs to projects. It is anticipated that the cost of these required measures would offset the cost of other watershed protection measures in the future. Polluted runoff impacts the aquatic environment, human health, and the economy. Better site design with water quality in mind has considerable potential to reduce the environmental impacts of development. Implementing water quality features within development breaks the pattern of designing for flood control where water quality was largely neglected. I think you would agree water quality is important to all of us so let's take steps now to protect it for future generations.

The City of San Diego launched its "Think Blue" media campaign in November to achieve our most important challenge - getting the word out to the community and making every citizen aware of their role in protecting and cleaning up our beaches and bays via behavior changes. Three public service announcements (PSAs) were developed and are currently airing on San Diego radio and television stations. These public service announcements as well as other information may viewed at the City's Think Blue website www.thinkbluesd.org.

In addition to producing the PSAs the City of San Diego is currently training all of its employees, so that they may lead by example in their communities. The City has also developed fact sheets and created information cards for residents, to use as reminders and educational resources. And, for those who may have questions or who want to report illegal discharges, the City of San Diego's Storm Water Hotline is (619) 235-1000. To report throughout the region, the hotline is (888) THINK-BLue.

Maybe someday, after *Sue's* been around for a while, water quality features will be everywhere. One neighbor will ask another on a rainy Saturday afternoon, "how's your biofilter doing?"